

the night. At Cheboygan, Mich., a thunderstorm began in the early morning and ended 7.45 a. m.; a barn was struck by lightning and burned. A thunderstorm, with exceptionally high wind, visited Thornville, Mich., in the afternoon.

26th.—Severe thunderstorms occurred in New England in the early morning. At Madison, Me., a set of farm buildings were destroyed. In New Hampshire and Vermont a number of buildings were struck by lightning and burned. At Taunton, Mass., a barn was struck by lightning and burned. At Nahant, Mass., several houses were unroofed, and a number of vessels dragged anchor and parted cables. At Narragansett Pier, R. I., a thunderstorm prevailed from 5.30 to 10 a. m. At New Haven, Conn., high wind began 10 a. m., causing damage of a minor character. At Woods Holl, Mass., the wind reached a velocity of 52 miles per hour from the southwest. High northwest winds prevailed over New York. In Brooklyn, N. Y., several unfinished buildings were blown down, and two boys and a man were killed. Many

small vessels were driven ashore or sunk. At Oswego, N. Y., the wind reached a velocity of 51 miles per hour from the northwest. Damage was caused by heavy wind about Dyerberry, Pa. At Lodi, Cal., a thunderstorm occurred between 8 and 11 p. m.; east of that place, at Clements, high wind, heavy rain, and hail were reported, and a man was killed by a falling tree.

27th.—The night of the 26–27th the wind reached a velocity of 100 miles per hour from the northwest, and snow fell on the summit of Mount Washington, N. H. An exceptionally heavy rain and thunder storm was reported at Brunswick, Ga., in the morning; streets were flooded, causing great damage to property. A heavy thunderstorm from the northwest visited Columbia, Mo., in the evening.

28th.—Stock was killed by lightning at Irena, Mo., and damage was caused by lightning at Clinton, Mo.

29th.—A severe rain, wind, and hail storm visited Eagle Pass, Tex., about 6 p. m.

INLAND NAVIGATION.

STAGE OF WATER IN RIVERS.

The following table shows the danger-points at the various river stations; the highest and lowest stages for the month, with the dates of occurrence, and the monthly ranges:

Heights of rivers above low-water mark, Sept., 1892 (in feet and tenths).

Stations.	Danger-point on gauge.	Highest water.		Lowest water.		Monthly range.
		Height.	Date.	Height.	Date.	
<i>Red River.</i>						
Shreveport, La.	29.9	4.6	19, 20	1.7	15, 30	2.9
<i>Arkansas River.</i>						
Fort Smith, Ark.	22.0	6.2	2	1.5	30	4.7
Little Rock, Ark.	23.0	9.2	4	6.3	29, 30	2.9
<i>Missouri River.</i>						
Fort Buford, N. Dak. ....	.....	7.0	1	4.9	29	2.1
Bismarck, N. Dak. ....	.....	2.5	1, 2, 8	1.8	26–30	0.7
Pierre, S. Dak.	14.0	1.6	1–4	0.5	30	1.1
Sioux City, Iowa	18.7	6.4	1	5.1	30	1.3
Omaha, Nebr.	18.0	7.8	1, 2	5.9	30	1.9
Kansas City, Mo.	21.0	8.1	1	5.8	29, 30	2.3
<i>Mississippi River.</i>						
Saint Paul, Minn.	14.0	4.1	14	2.9	28	1.2
La Crosse, Wis.	11.8	3.6	15–17	2.4	30	1.2
Dubuque, Iowa	16.0	4.8	20	3.5	30	1.3
Davenport, Iowa	15.0	3.2	11, 12, 16–18	2.2	9	1.0
Keokuk, Iowa	14.0	3.5	1	2.2	30	1.3
Hannibal, Mo.	17.0	4.8	1	3.4	9, 10, 30	1.4
Saint Louis, Mo.	30.0	9.6	1	6.8	30	2.8
Cairo, Ill.	40.0	10.1	1	7.0	30	3.1
Memphis, Tenn.	33.0	7.7	1	5.1	30	2.6
Vicksburg, Miss.	41.0	11.2	1	5.3	30	5.9
New Orleans, La.	13.0	5.2	12	3.5	21–23	1.7

Heights of rivers—Continued.

Stations.	Danger-point on gauge.	Highest water.		Lowest water.		Monthly range.
		Height.	Date.	Height.	Date.	
<i>Ohio River.</i>						
Parkersburg, W. Va.	38.0	5.0	2	1.9	28	3.1
Cincinnati, Ohio	45.0	7.2	7	4.8	19, 20	2.4
Louisville, Ky.	24.0	4.1	8, 9	3.4	22, 23	0.7
<i>Cumberland River.</i>						
Nashville, Tenn.	40.0	2.3	5, 6	1.1	30	1.2
<i>Tennessee River.</i>						
Chattanooga, Tenn.	33.0	4.6	17	1.3	5	3.3
Knoxville, Tenn.	29.0	.....		.....		.....
<i>Monongahela River.</i>						
Pittsburg, Pa.	29.0	6.2	12, 18	4.8	23	1.4
<i>Savannah River.</i>						
Augusta, Ga.	32.0	20.8	23	5.9	10, 12	14.9
<i>Willamette River.</i>						
Portland, Oregon	15.0	3.6	6, 7	1.2	30	2.4
<i>Susquehanna River.</i>						
Harrisburg, Pa.	17.0	2.9	1	1.1	29, 30	1.8
<i>Alabama River.</i>						
Montgomery, Ala.	48.0	7.2	25	1.8	12	5.4

At Chattanooga, Tenn., navigation on the Tennessee River was suspended on the 9th on account of low water; on the 15th, 16th, and 17th the river rose slowly, and on the 17th navigation opened on the upper Tennessee; on the 18th the river was falling; on the 21st navigation was again closed on account of low water; on the 25th and 26th the river rose slowly.

ATMOSPHERIC ELECTRICITY.

THUNDERSTORMS.

Description of the more severe thunderstorms of the month is given under "Local storms."

Thunderstorms were reported as follows: East of the Rocky Mountains they were reported in the greatest number of states, 24, on the 26th; in 23 on the 9th and 25th; in 15 to 20 on the 4th, 5th, 7th, 8th, 10th, 12th, 13th, 19th, 20th, and 21st; in 10 to 14 on the 3d, 6th, 11th, 14th, 22d, 23d, 24th, and 27th; in 5 to 9 on the 1st, 2d, 16th, 17th, 18th, 28th, 29th, and 30th. The only date on which they were reported in less than 5 states was the 15th, when they were noted in Florida and New York.

East of the Rocky Mountains thunderstorms were reported on the greatest number of dates, 30, in Florida; on 15 to 20 in Georgia, Iowa, Michigan, Mississippi, North Carolina,

Pennsylvania, and Wisconsin; on 10 to 14 in Alabama, Illinois, Indiana, Kansas, Kentucky, Louisiana, Missouri, Nebraska, New York, Ohio, South Carolina, South Dakota, Tennessee, and Texas; on 5 to 9 in Arkansas, Maryland, Minnesota, Montana, North Dakota, Oklahoma, Virginia, and West Virginia; and on 1 to 4 in Connecticut, District of Columbia, Maine, Massachusetts, New Hampshire, New Jersey, Rhode Island, and Vermont.

West of the Rocky Mountains thunderstorms were reported in Arizona on the 1st, 5th to 10th, 24th, 27th, and 30th; in California, on the 7th, 8th, 18th, 24th, 25th, 26th, 28th, 29th, and 30th; in Colorado on the 1st to 4th, 18th, 19th, 20th, 28th, and 29th; in Idaho on the 29th; in Nevada on the 1st, 2d, 9th, 14th, 19th, 24th, 25th, 26th, 28th, 29th, and 30th; in New Mexico on the 4th, 5th, 7th, 9th, and 10th; in Utah on the 2d, 26th, 28th, 29th, and 30th; in Washington on the